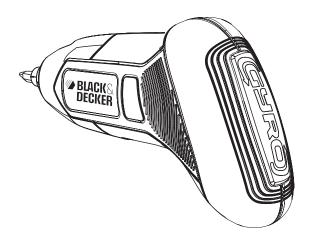


MOTION SENSING SCREWDRIVER

INSTRUCTION MANUAL



Catalog Number BDCS40G

Thank you for choosing Black & Decker! Go to www.BlackandDecker.com/NewOwner to register your new product.

PLEASE READ BEFORE RETURNING THIS PRODUCT FOR ANY REASON:

If you have a question or experience a problem with your Black & Decker purchase, go to

WWW.BLACKANDDECKER.COM/INSTANTANSWERS

for instant answers 24 hours a day.

If you can't find the answer or do not have access to the internet, call 1-800-544-6986 from 8 a.m. to 5 p.m. EST Mon. - Fri to speak with an agent.

Please have the catalog number available when you call.

SAVE THIS MANUAL FOR FUTURE REFERENCE.
VEA EL ESPAÑOL EN LA CONTRAPORTADA.
POUR LE FRANÇAIS, VOIR LA COUVERTURE ARRIÈRE.

INSTRUCTIVO DE OPERACIÓN, CENTROS DE SERVICIO Y PÓLIZA DE GARANTÍA. ADVERTENCIA: LÉASE ESTE INSTRUCTIVO ANTES DE USAR EL PRODUCTO.

SAFETY GUIDELINES - DEFINITIONS

It is important for you to read and understand this manual. The information it contains relates to protecting YOUR SAFETY and PREVENTING PROBLEMS. The symbols below are used to help you recognize this information.

△DANGER: Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠WARNING: Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE: Used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

GENERAL POWER TOOL SAFETY WARNINGS

⚠ WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

1) Work area safety

- a) Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

2) Electrical safety

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.

3) Personal safety

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.

- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

4) Power tool use and care

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- g) Use the power tool, accessories and tool bits etc., in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Battery tool use and care

- a) Recharge only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- b) Use power tools only with specifically designated battery packs. Use of any other battery packs may create a risk of injury and fire.
- c) When battery pack is not in use, keep it away from other metal objects like paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- d) Under abusive conditions, liquid may be ejected from the battery, avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help. Liquid ejected from the battery may cause irritation or burns.

6) Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SPECIFIC SAFETY RULES

- Hold power tool by insulated gripping surfaces, when performing an operation
 where the fastener may contact hidden wiring. Fasteners contacting a "live" wire may
 make exposed metal parts of the power tool "live" and could give the operator an electric
 shock.
- Use clamps or another practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body leaves it unstable and may lead to loss of control.

⚠ WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and

· arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

 Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

⚠WARNING: Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

△WARNING: ALWAYS use safety glasses. Everyday eye glasses are NOT safety glasses. Also use face or dust mask if cutting operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3)
- ANSI S12.6 (S3.19) hearing protection
- NIOSH/OSHA/MSHA respiratory protection

SYMBOLS

The label on your tool may include the following symbols.

٧	.volts	A	amperes
Hz	.hertz	W	watts
min	.minutes	∼	alternating current
===		n ₀	no load speed
□	.Class II Construction	⊕	earthing terminal
^	.safety alert symbol	/min	revolutions per minute

 When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The following table shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

Recommended Minimum Wire Size for Extension Cords

Total Length of Cord

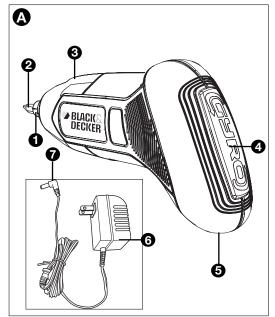
25 ft.	50 ft.	75 ft.	100 ft.	125 ft.	150 ft.	175 ft.	
7.6 m	15.2 m	22.9 m	30.5 m	38.1 m	45.7 m	53.3 m	
Wire Siz	e AWG						
18	18	16	16	14	14	12	

A SAFETY WARNINGS AND INSTRUCTIONS: BATTERIES

- Do not disassemble or open, drop (mechanical abuse), crush, bend or deform, puncture, or shred.
- Do not modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, excessive heat including soldering irons, or put in microwave oven.
- Only use the battery / tool with a charging system specified by the manufacturer/supplier.
- Do not short-circuit a battery or allow metallic or conductive objects to contact both battery terminals simultaneously.
- Dispose of used batteries promptly according to the manufacturer/supplier's instructions.

FUNCTIONAL DESCRIPTION

- 1) HEX SPINDLE
- 2.) SCREWDRIVER BIT
- 3.) LED LIGHT
- 4.) MOTION CONTROL ACTIVATOR
- 5.) CHARGING PORT
- 6.) CHARGER
- 7.) CHARGER PLUG



- Improper battery use may result in a fire, explosion, or other hazard.
- Battery / tool usage by children should be supervised.

SAFETY WARNINGS AND INSTRUCTIONS: CHARGING

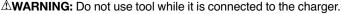
- 1. This manual contains important safety and operating instructions.
- 2. Before using battery charger, read all instructions and cautionary warnings on battery charger and product using battery.
 - **ACAUTION:** To reduce the risk of injury, use this charger only with this product. Batteries in other products may burst causing personal injury or damage.
- 3. Do not expose charger to rain or snow.
- 4. Use of an attachment not recommended or sold by Black & Decker may result in a risk of fire, electric shock, or injury to persons.
- 5. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- 6. Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- 7. An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire, electric shock or electrocution.
- 8. Use only the supplied charger when charging your tool. The use of any other charger could damage the tool or create a hazardous condition.
- 9. Use only one charger when charging.
- 10. Do not attempt to open the charger. There are no customer serviceable parts inside. Return to any authorized Black & Decker service center.
- 11. DO NOT incinerate the tool or batteries even if they are severely damaged or completely worn out. The batteries can explode in a fire. Toxic fumes and materials are created when lithium ion battery packs are burned.
- 12. Do not charge or use battery in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Inserting or removing the battery from the charger may ignite the dust or fumes.
- 13. If battery contents come into contact with the skin, immediately wash area with mild soap and water. If battery liquid gets into the eye, rinse water over the open eye for three minutes or until irritation ceases. If medical attention is needed, the battery electrolyte is composed of a mixture of liquid organic carbonates and lithium salts.
- **A WARNING:** Burn hazard. Battery liquid may be flammable if exposed to spark or flame.

CHARGING PROCEDURE

IMPORTANT: The batteries in your tool are not fully charged at the factory. Before attempting to charge them, thoroughly read all of the safety instructions.

- The charging port (5) is keyed to lock out other chargers. Align the tab in the charger plug (7) with the key in the charging port.
- Insert charger plug into the charging port of the tool as shown in figure B.
- Plug the charger into any standard 120 Volt 60 Hz electrical outlet.
- Let the tool charge initially for at least 16 hours. After the initial charge, your tool should be fully charged in 12 hours from a fully discharged condition.
 Recharge discharged batteries as soon as

possible after use or battery life may be greatly diminished. For longest battery life, do not discharge batteries fully. It is recommended that the batteries be recharged after each use.



AWARNING: Fire Hazard. When disconnecting the charger from the tool, be sure to unplug the charger from the outlet first, then disconnect the charger cord from the tool.

Low Battery Indicator

When the battery reaches a low state of charge and needs to be re-charged, the unit
will shut off and the LED will blink rapidly (- - - - -) for 5 seconds. When this occurs
please recharge the battery before using further.

High Temperature Indicator

This unit has over-temperature protection. When the unit approaches a temperature above the normal range it will shut off and the LED will flash in a long-short pattern (- . - . -) for 5 seconds. If this occurs please allow the unit to cool down to a optimal operating temperature of approximately 75°F (24°C) before using further.

Important Charging Notes

- 1. Your tool was sent from the factory in an uncharged condition. Before attempting to use it, it must be charged for at least 16 hours.
- ACAUTION: To reduce the risk of damage to the batteries, NEVER charge them in an air temperature below 40°F (4,5°C) or above 105°F (40,5°C). Also, NEVER charge them if the battery temperature is below 40°F (4,5°C) or above 105°F (40,5°C). Longest life and best performance occurs when batteries are charged with an air temperature of approximately 75°F (24°C).
- 3. While charging, the charger may hum and become warm to touch. This is a normal condition and does not indicate a problem.
- 4. If the batteries do not charge properly—(1) Check current at receptacle by plugging in a lamp or other appliance. (2) Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights. (3) Check that the charger plug is fully inserted into the charger port on the tool. (4) If the receptacle is OK, and you do not get proper charging, take or send the tool and charger to your local Black & Decker service center. See Tools Electric in yellow pages.
- 5. The tool should be recharged when it fails to produce sufficient power on jobs which were easily done previously. Battery life may be greatly diminished if batteries are discharged deeply. DO NOT CONTINUE using product with its batteries in a depleted condition. Recharge discharged batteries promptly.
- 6. To maximize battery life:
 - a. Do not fully discharge batteries.
 - b. Fully recharge batteries after each use.
 - c. Store tool in a location where the surrounding air temperature is approximately $40^{\circ}F 75^{\circ}F$ ($4.5^{\circ}C 24^{\circ}C$).
 - d. Disconnect charger from tool after charge is complete.
- ⚠ WARNING: Fire Hazard. When disconnecting the charger from the tool, be sure to unplug the charger from the outlet first, then disconnect the charger cord from the tool.



ASSEMBLY AND ADJUSTMENT

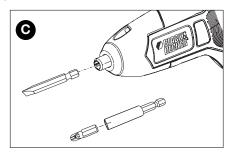
INSERTING AND REMOVING BITS (FIGURE C)

- To install a bit, insert it into the cavity in the hex spindle as shown in figure C.
- · To remove the bit pull it straight out.
- · For bit tips, use a bit tip extender as shown.

NOTE: Only hex end bits will fit in spindle.

⚠WARNING:

- Do not use screwdriver as a pry bar in any position.
- To avoid screwdriver being turned on accidentally, do not carry in your pocket.



OPERATING INSTRUCTIONS

Your screwdriver uses gyroscopic technology to sense your hand motion. To operate, press in the motion control activator on the back of the tool with your palm and turn your hand in the direction that you want the screwdriver to operate.

SETTING INITIAL STARTING POINT

- · Grasp the screwdriver as shown in figure D.
- Press and hold in the motion control activator on the back of the tool with the palm of your hand.
- · When the LED illuminates the tool is ready for use.
- To reset initial starting point first release the motion control activator. Move tool to new position, then press and hold in the motion control activator on the back of the tool with the palm of your hand.



OPERATING IN FORWARD DIRECTION

- Grasp the screwdriver as shown in figure E.
- Engage head of fastener with screwdriver accessory on work piece. Follow instructions for setting initial starting point.
- Rotate your hand to the right and the screwdriver will activate in the forward direction.



OPERATING IN REVERSE DIRECTION

- · Grasp the screwdriver as shown in figure E.
- Engage head of fastener with screwdriver accessory on work piece. Follow instructions for setting initial starting point.
- Rotate your hand to the left and the screwdriver will activate in the reverse direction.



To turn the tool off, release the motion control activator.

NOTE: When the tool is not in use or during transit please be sure to remove any accessory from the tool.

45 SECOND AUTOMATIC SHUT OFF

 To maintain battery life in the case of accidental actuation, this unit will shut itself off after 45 seconds of continuous operation. The LED will flash rapidly for 5 seconds before the unit turns off.

VARIABLE SPEED

- The spindle speed is dependent upon the speed that you rotate your hand.
- The slower you rotate your hand, the slower the screwdriver turns.
- The faster you rotate your hand, the faster the screwdriver turns.
- If you wish to increase the spindle speed, rotate your hand further in the same direction.
- If you wish to decrease the spindle speed, rotate your hand back towards the initial starting point.

GYRO CONTROL CALIBRATION

This unit automatically re-calibrates itself periodically to ensure proper operation of the motion-based gyro controls. In the event that the unit controls appear to be acting improperly, the unit can be re-calibrated by pressing the motion control activator button, releasing, and letting it rest completely still on a level surface. The LED will flash twice within 5 seconds to indicate that the unit has been successfully re-calibrated.

MAINTENANCE

Use only mild soap and damp cloth to clean the tool. Never let any liquid get inside the tool; never immerse any part of the tool into a liquid.

IMPORTANT: To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (other than those listed in this manual) should be performed by authorized service centers or other qualified service personnel, always using identical replacement parts.

BATTERY REMOVAL AND DISPOSAL

This product uses lithium-ion rechargeable and recyclable batteries. When the batteries no longer hold a charge, they should be removed from the product and recycled. They must not be incinerated or composited.

The batteries can be taken for disposal to a Black & Decker, Company-Owned or Authorized Service Center. Some local retailers are also participating in a national recycling program (see "RBRC™ Seal"). Call your local retailer for details. If you bring the batteries to a Black & Decker Company-Owned or Authorized Service Center, the Center will arrange to recycle old batteries. Or, contact your local municipality for proper disposal instructions in your city/town.

To remove the battery pack for disposal:

- 1.) First, before attempting to disassemble the product, turn it on and run it in either direction until it stops to ensure a complete discharge of the batteries.
- 2.) Remove the screws in the product housing and lift the housing half from the tool.
- 3.) Disconnect the terminal clips from the batteries and lift the batteries out.
- 4.) Place the battery in suitable packaging to prevent a short circuit of the battery terminals.
- 5.) Dispose of batteries as per recommended guidelines.

TROUBLESHOOTING

Problem

Possible Cause

Possible Solution

- Battery will not charge.
- Charger not plugged into a working outlet.
- Plug charger into a working outlet. Refer to "Important Charging Notes" for more details.
- Check current at receptacle by plugging in a lamp or other appliance.
- Check to see if receptacle is connected to a light switch which turns power off when you turn out the lights.
- Charger jack not fully plugged into tool charging socket.
- Check to be sure charger plug is fully inserted into tool charging socket.

- · Unit does not operate.
- Motion control activator is not fully depressed.
- Ensure motion control activator is fully pressed in.

For assistance with your product, visit our website **www.blackanddecker.com** for the location of the service center nearest you or call the BLACK & DECKER help line at **1-800-544-6986**.

ACCESSORIES

Recommended accessories for use with your tool are available from your local dealer or authorized service center. If you need assistance regarding accessories, please call: 1-800-544-6986.

△ WARNING: The use of any accessory not recommended for use with this tool could be hazardous.

THE RBRC™ SEAL

The RBRC™ (Rechargeable Battery Recycling Corporation) Seal on the lithium-ion battery (or battery pack) indicates that the costs to recycle the battery (or battery pack) at the end of its useful life have already been paid by Black & Decker. In some areas, it is illegal to place spent lithium-ion batteries in the trash or municipal solid waste stream and the RBRC program provides an environmentally conscious alternative.

RBRC in cooperation with Black & Decker and other battery users, has established programs in the United States and Canada to facilitate the collection of spent lithium-ion batteries. Help protect our environment and conserve natural resources by returning the tool to an authorized Black & Decker service center for recycling. You may also contact your local recycling center for information on where to drop off the spent battery, or call **1-800-8-BATTERY**.

SERVICE INFORMATION

All Black & Decker Service Centers are staffed with trained personnel to provide customers with efficient and reliable power tool service. Whether you need technical advice, repair, or genuine factory replacement parts, contact the Black & Decker location nearest you. To find your local service location, refer to the yellow page directory under "Tools—Electric" or call: 1-800-544-6986 or visit www.blackanddecker.com

FULL TWO-YEAR HOME USE WARRANTY

Black & Decker (U.S.) Inc. warrants this product for two years against any defects in material or workmanship. The defective product will be replaced or repaired at no charge in either of two ways.

The first, which will result in exchanges only, is to return the product to the retailer from whom it was purchased (provided that the store is a participating retailer). Returns should be made within the time period of the retailer's policy for exchanges (usually 30 to 90 days after the sale). Proof of purchase may be required. Please check with the retailer for their specific return policy regarding returns that are beyond the time set for exchanges.

The second option is to take or send the product (prepaid) to a Black & Decker owned or authorized Service Center for repair or replacement at our option. Proof of purchase may be required. Black & Decker owned and authorized Service Centers are listed under "Tools-Electric" in the yellow pages of the phone directory and on our website www.blackanddecker.com.

This warranty does not apply to accessories. This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact the manager of your nearest Black & Decker Service Center. This product is not intended for commercial use.

LATIN AMERICA: This warranty does not apply to products sold in Latin America. For products sold in Latin America, check country specific warranty information contained in the packaging, call the local company or see the website for warranty information.

FREE WARNING LABEL REPLACEMENT: If your warning labels become illegible or are missing, call 1-800-544-6986 for a free replacement.



Imported by: Black & Decker (U.S.) Inc., 701 E. Joppa Rd. Towson, MD 21286 U.S.A. See 'Tools-Electric'
- Yellow Pages for Service & Sales



